# 504372766 05/17/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4419460

SUBMISSION TYPE:		NEW ASSIGNMENT		
IATURE OF CONVEYAN	CE:	ASSIGNMENT		
CONVEYING PARTY DA	TA			
		Name	Execution Date	
PRADEEP RAJ			05/12/2017	
RAHUL SAHU			05/12/2017	
MUKUND NARASIMHAN			05/12/2017	
FAHAD AHMED			05/15/2017	
CHULMIN JUNG			05/15/2017	
RECEIVING PARTY DAT				
Name:		OMM INCORPORATED		
Street Address:	5775 MOREHOUSE DRIVE			
City:	SAN DIEGO			
State/Country:	CALIFORNIA			
Postal Code:	92121-1	714		
PROPERTY NUMBERS Total: 1 Property Type				
Property Type		Number		
		<b>Number</b> 15448526		
Application Number:				
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Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be	ATA sent to	15448526		
Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p	ATA sent to rovided	15448526 (949)202-3001 the e-mail address first; if that is unsucce		
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Application Number: CORRESPONDENCE DA Fax Number: <i>Correspondence will be using a fax number, if p</i> Phone: Email: Correspondent Name:	ATA sent to rovided	(949)202-3001 <i>the e-mail address first; if that is unsucce</i> <i>; if that is unsuccessful, it will be sent via</i> 214 651 5000 monique.lesadahiro@haynesboone.com HAYNES AND BOONE, LLP		
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Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU	ATA sent to rovided	(949)202-3001 the e-mail address first; if that is unsuccest; if that is unsuccessful, it will be sent via 214 651 5000 monique.lesadahiro@haynesboone.com HAYNES AND BOONE, LLP IP SECTION 2323 VICTORY AVENUE, SUITE 700 DALLAS, TEXAS 75219 49606.436US01 (165499)		
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**Total Attachments: 6** 

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PATENT QUALCOMM Ref. No. 165499 Page 1 of 3

#### ASSIGNMENT

WHEREAS, WE,

1. Pradeep RAJ, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of Bangalore, India,

2. Rahul SAHU, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of Bangalore, India,

3. Mukund NARASIMHAN, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of Bangalore, India,

4. Fahad AHMED, a citizen of Pakistan, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of San Diego, California,

5. Chulmin JUNG, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121 and a resident of San Diego, California,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **WRITE DRIVER CIRCUITRY TO REDUCE LEAKAGE OF NEGATIVE BOOST CHARGE** (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). **15/448,526** filed **March 2, 2017**, Qualcomm Reference No. **165499**, and all provisional applications relating thereto, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all

PATENT REEL: 042417 FRAME: 0479 reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

## PATENT REEL: 042417 FRAME: 0480

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	Bangalore, on	12/MAY/2012-	Produp Roj
~	LOCATION	DATE	Pradeep RAJ
Done at _	Bangalore, on	12 mmay 2017 DATE	Rahul SAHU
	LUCATION	DATE	· · · · · · · · · · · · · · · · · · ·
Done at _	Bangalore, on	12th May 2017	misburd
	LOCATION	DATE	Mukund NARASIMHAN
Done at	, on		
	LOCATION, on	DATE	Fahad AHMED
Done at	on		
Done at	LOCATION, on	DATE	Chulmin JUNG

PATENT QUALCOMM Ref. No. 165499 Page 1 of 3

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have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **WRITE DRIVER CIRCUITRY TO REDUCE LEAKAGE OF NEGATIVE BOOST CHARGE** (collectively the "**INVENTIONS**") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). **15/448,526** filed **March 2, 2017**, Qualcomm Reference No. **165499**, and all provisional applications relating thereto, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all

reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	, on		
	LOCATION	DATE	Pradeep RAJ
Done at	LOCATION , on		
	LOCATION	DATE	Rahul SAHU
Done at	, on		
	LOCATION	DATE	Mukund NARASIMHAN
Done at $\leq$	<u>مس ( دوره</u> , on_ LOCATION	<u>shqn</u>	<u></u>
	LOCATION	DATE	Fahad AHMED
Done at	Com Diego, on_	5715/1-1	nle
	LOCATION	DATE	Chulmin JUNG

RECORDED: 05/17/2017